Simulation Design for Example 3MRA Exit Level Analysis for 7 Chemicals

Exit Level Description	Scenario	
Scenario ID	**1**	**2**
Protection Levels		
% Population Protected	99%	95%
% Sites Protected	95%	95%
Protective?	More	Less
Human		
Distance (m)	500	2000
Cancer Risk	10^{-6}	10^{-5}
Hazard Risk	0.1	1
Exposure Pathway[1]	Sum Ingestion & Inhalation	
Receptor Group	All Receptors	
Cohort Group	All Cohorts	
Ecological		
Ring Distance (m)	2000	2000
Hazard Risk	1	1
Roll-up by Habitat Group[2]	Terrestrial, Aquatic, Wetland	
Simulation Design		
Sources/Chemicals/Cws	5/7/5	
Sites/sources	419	
# National Realizations	369	
# Modeling System Runs[3]	5,411,385	

Scenario Identification for Joint Human and Ecological Risk Assessment

[2] To evaluate ecological roll-ups jointly with human concerns, scenarios are further broken down by habitat group.

Scenario 1		
Scenario 1a	Human	Terrestrial
Scenario 1b	Human	Aquatic
Scenario 1c	Human	Wetland
Scenario 2		
Scenario 2a	Human	Terrestrial
Scenario 2b	Human	Aquatic
Scenario 2c	Human	Wetland

[1] When "Sum of Inhalation & Ingestion" is specified, special cases for human risk are considered when assigning data "By Receptor", "By Cohort", and "By Distance". See Note #6e to better understand how the ELP2Vis deals with Carc. and Non-Carc. flags, and "additivity" of risk, which together represent chemical specific considerations in how data is handled.

3MRA Simulation Batching Sequence Using SuperMUSE and 3MRA Ver. 1.x

[3] To conduct the example experiment, simulations of 20 to 30 national realizations were launched in several batches. Each national realization was aggregated in a separate ELP1 database, with database name concatenated from "ParSUITest", and values for "BatchID" and "Realization#".

BatchID	Initial[a] Seed	# Realizations Issued	# Realizations Successful
A	11031	30	29[b]
B	12289	30	30
C	3239	20	20
D	19189	30	30
E	28925	30	30
F	28458	30	30
G	30834	25	25
H	467	30	30
I	13107	30	30
J	27771	30	25[c]
K	4459	30	30
L	7883	30	30
M	1463	30	30
Total # National Realizations >>			369

[a] Initial seeds (500) were randomly selected in Excel.
[b] Final R30 ELP1 database was corrupted on server.
[c] Final J20 to J24 ELP1 databases failed checksum.